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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,807	08/04/2004	Gerhard Schoonderbeek	68.0452	4806

35204 7590 02/09/2007  
SCHLUMBERGER RESERVOIR COMPLETIONS  
14910 AIRLINE ROAD  
ROSHARON, TX 77583

EXAMINER
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THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
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3672

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/710,807		SCHOONDERBEEK ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kenneth Thompson		3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 21, 23-30 is/are rejected.
- 7) ☒ Claim(s) 16-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 16-19 and 28-30 are objected to because of the following informalities:

The recitation "the aperture" in claim 16, line 5 and 6 should be changed to "at least one of said apertures", "each of said apertures", "apertures", or the like. Claims 17-19 depend from claim 16 and are likewise objected to. Appropriate correction is required.

Claim 28 should end with a period. Claims 29 and 30 depend from claim 28 and are likewise objected to.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 4-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Breukelman, U.S. 2,897,897.

Regarding claims 1, 2 and 4-12, Breukelman discloses a casing having apertures (45) for produced fluid; an injection conduit (15,20; col. 2, lines 47-53) having apertures (25), graduated apertures (21; col. 3, lines 13-16), one-way valves (31) in some apertures (21) flush with the outer circumference, wherein the valve limits flow into the

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conduit (col. 3, lines 20-26) and limits outward flow from the conduit (col. 4, lines 19-28) to a lesser degree than inward flow.

As to claims 13, Breukelman discloses cup packers (16,17) limiting wellbore cross-flow.

As to claims 14, Breukelman discloses in figure 3 the apertures (21) having an increasing diameter along the length of the conduit which creates a larger space between the smaller diameter apertures near the top portion than the space between the larger diameter apertures at the lower portion and limits fluid pressure surge.

Claims 1, 3, 21, 23-25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Patton et al., U.S. 4,258,788.

Patton discloses in figures 1 and 12 a conduit (4) isolating formation intervals with packers (7), axially spaced apertures (11), a one-way valve (32), a base pipe (9) and screen (38) covering the aperture.

Patton discloses in figure 6 injecting fluid through an aperture (11) with a varied concentrated area to the interior of the conduit having a check valve (15) and filter plate (21) and a spring (20) dampening.

Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Schroeder, Jr. et al., U.S. 5,127,474.

Schroeder, Jr. et al. discloses a housing (40,52) within radial ports (at 38) in a well conduit (22) having a plurality of apertures (26) and a valve member (48).

Claims 26 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryan, U.S. 2,2147,305.

Bryan discloses a conduit (2) having a valve (21) therein, radial apertures (25) and a valve (26; 27, 28) meeting the first alternative of allowing flow from the exterior to the interior and limiting outward flow via a varied concentrated outlet port area (at 27).

Claims 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Gray, U.S. 2,602,516.

Gray discloses a production conduit (36) apertures (at 14) radially spaced from the conduit longitudinal axis, a check ball valve (17) and seat (14) meeting the first alternative of allowing flow from the exterior to the interior and restricting flow from the interior to the exterior and a gland screen (15) covering the aperture.

### ***Response to Arguments***

Applicant's arguments filed 17 November 2006 have been fully considered but they are not persuasive.

Applicants argue the prior art of Breukelman does not include communication with the surface via tubing and not with a target reservoir.

Breukelman discloses fluid communication with a producing oil well formations via the tubing.

Applicants argue the limitation "restricting flow" in claim 9 requires flow.

The claim does not require a restricted flow of fluid through the aperture and the prior art check valve restricts fluid from flowing.

***Allowable Subject Matter***

Claims 16-19 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

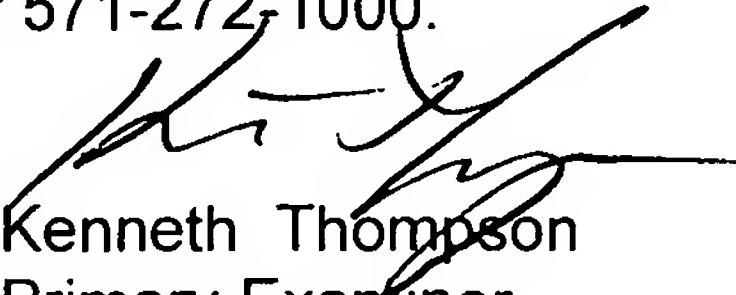
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Thompson whose telephone number is 571 272-7037. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5 February 2007



Kenneth Thompson  
Primary Examiner  
Art Unit 3672